

REMARKS

Claims 1, 2, 16, and 17 have been amended. Claims 12-15 have been canceled without prejudice or disclaimer. Claims 22 and 23 have been newly added. Claims 1-9, 11, and 16-23 are pending. Support for new claim 22 can be found *e.g.* in canceled claim 12. Applicants respectfully request reexamination and allowance of claims 1-9, 11, and 16-23.

Claim Objections

Claims 16 and 17 were objected to for informalities. The Examiner's comments have been considered and appropriate correction has been made.

Claim Rejections

Claims 1-4, 9 and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki (US 5,608,695, hereinafter "Yamazaki"). Applicants respectfully assert that independent claims 1 and 16 are patentable.

Claim 1 recites an optical semiconductor device including an emitted beam dividing portion for dividing an emitted light beam from a laser element into a main beam and two sub beams. The emitted beam dividing portion also diffracts a reflected light beam towards a signal-detecting photodetector element. This configuration enables a light receiving area of the signal-detecting photodetector element to be reduced, thereby reducing the capacitance associated with the photodetector element and ensuring high-speed response of the reproduction signals. Reducing the area of the signal-detecting photodetector element also leads to a decrease in stray light components, thereby enabling reproduction signals with an excellent S/N ratio to be obtained.

Yamazaki fails to disclose or suggest an emitted beam dividing portion as recited in claim 1. In particular, Yamazaki fails to disclose or suggest an emitted beam dividing portion that functions both to divide an emitted light beam from a laser element and to diffract a light beam reflected by a recording medium. Applicants respectfully point out that the second hologram (28b) diffracts a light beam reflected by the optical record medium (23) and not emitted from the semiconductor laser (29). See column 4, lines 39-46. Furthermore, the beam emitted by the semiconductor laser (29) is merely transmitted through the first and second holograms (28a) and (28b), rather than divided by them. See column 4, lines 56-60. Therefore, for at least these

reasons, Yamazaki does not anticipate claim 1. Claims 2-4, and 9 depend from claim 1 and are allowable for at least the same reasons.

Claim 16 recites an optical information processing device including an emitted beam dividing portion for dividing an emitted light beam from a laser element into a main beam and two sub beams. The emitted beam dividing portion also diffracts a reflected light beam towards a signal-detecting photodetector element. Therefore, Yamazaki does not anticipate claim 16 for at least the reasons noted above. Applicants do not otherwise concede the correctness of the rejection, and reserve the right to make additional arguments as may be necessary.

Claim 5 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Opheij et al. (US 4,918,679, hereinafter "Opheij"). This rejection is respectfully traversed. Claim 5 depends from claim 1 and is therefore patentable over Yamazaki for at least the reasons discussed above. Opheij does not overcome the shortcomings of Yamazaki. Therefore, for at least these reasons, Yamazaki would not lead a person having skill in the art to the invention of claim 5, even in view of Opheij. Applicants do not otherwise concede the correctness of the rejection to this claim, and reserve the right to make additional arguments as may be necessary.

Claims 6-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Heemskerk (US 4,665,310, hereinafter "Heemskerk"). This rejection is respectfully traversed. Claims 6-8 depend from claim 1 and are therefore patentable over Yamazaki for at least the reasons discussed above. Heemskerk does not overcome the shortcomings of Yamazaki. Therefore, for at least these reasons, Yamazaki would not lead a person having skill in the art to the inventions of claims 6-8, even in view of Heemskerk. Applicants do not otherwise concede the correctness of the rejection to these claims, and reserve the right to make additional arguments as may be necessary.

Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Miyazaki et al. (JP 10134395 A, hereinafter "Miyazaki"). This rejection is respectfully traversed. Claim 11 depends from claim 1 and is therefore patentable over Yamazaki for at least the reasons discussed above. Miyazaki does not overcome the shortcomings of Yamazaki. Therefore, for at least these reasons, Yamazaki would not lead a person having skill in the art to the invention of claim 11, even in view of Miyazaki. Applicants

do not otherwise concede the correctness of the rejection to this claim, and reserve the right to make additional arguments as may be necessary.

Claims 12 and 13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Kurata et al. (US 5,111,449, hereinafter "Kurata"). Claims 12 and 13 have been canceled without prejudice or disclaimer and this rejection is therefore moot.

Claim 14 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki & Kurata, and further in view of Opheij. Claim 14 has been canceled without prejudice or disclaimer and this rejection is therefore moot.

Claim 15 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki & Kurata, and further in view of Heemskerk. Claim 15 has been canceled without prejudice or disclaimer and this rejection is therefore moot. Applicants do not concede the correctness of the rejections of claims 12-15.

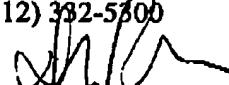
Claims 17-21 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Hasegawa et al. (US 5,881,043, hereinafter Hasegawa"). This rejection is respectfully traversed. Claims 17-21 depend from claim 1 and are therefore patentable over Yamazaki for at least the reasons discussed above. Hasegawa does not overcome the shortcomings of Yamazaki. Therefore, for at least these reasons, Yamazaki would not lead a person having skill in the art to the inventions of claims 17-21, even in view of Hasegawa. Applicants do not otherwise concede the correctness of the rejection to these claims, and reserve the right to make additional arguments as may be necessary.

Claim 22, which is newly added, recites, in part, a first optical element including first, second and third diffraction gratings with the first diffraction grating being positioned between the second and third diffraction gratings. Yamazaki fails to disclose or suggest that a first optical element includes a second and third diffraction grating. Yamazaki further fails to disclose or suggest that a first diffraction grating is positioned between a second and third diffraction grating. None of the cited references overcome the shortcomings of Yamazaki. Applicants respectfully request allowance of claim 22. Claim 23 depends from claim 22 and is allowable for at least the same reasons.

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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DPM/JKS/jt